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#### ABSTRACT

School administrators need in-depth information to mount effective facility planning efforts, to develop and maintain satisfactory buildings for modern educational programs, to supervise the work of other professionals and technicians in designing and constructing facilities, and to evaluate such efforts. This document is an outline or syllabus for a college course covering these topics. It lists the objectives for the course, including that the student will be able to describe and evaluate the process used in various types of facility planning, and outlines the class requirements. The 19 suggested course topics include an introduction to the planning process, organizing staff for a building program, long-range planning, surveying existing facilities, facility evaluation instruments, developing capital improvement, involving the community, architectural selection, site selection, educational facility specifications, facility design, bidding, evaluation, plant maintenance, energy utilization, and other topics. (Contains 83 references.) (RJM)

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#### PLANNING EDUCATIONAL FACILITIES

**EDAD 6034** 

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#### 1. EDUCATIONAL OBJECTIVES

Basic information needed by administrators to mount an effective planning effort within an organization; to plan, develop and maintain satisfactory buildings to house modern educational programs; to supervise the work of other professionals and technicians in designing and constructing facilities; and to evaluate such efforts. This course meets Virginia requirements for placement on the Eligible List of Division Superintendents.

At the completion of this course, the student will be able to:

- a. describe and evaluate the process used in various types of planning
- b. organize a staff for a planning effort and describe the various roles persons play in the planning process
- c. describe a long-range planning document and how it is developed
- d. describe the methods of financing capital construction
- e. identify and use basic methods of projecting student populations
- f. describe the legal basis and constraints related to planning facilities, acquiring sites, constructing and bidding projects
- g. prepare a building evaluation instrument and conduct an evaluation of existing facilities
- h. describe and utilize various methods of programming facilities
- i. evaluate energy conservation methods and organize audits of facilities
- j. read and evaluate architectural plans and designs in reference to educational programs and to barrier-free environment
- k. describe the operation and maintenance of facilities.

#### 2. CLASS REQUIREMENTS

- a. Read the Assigned Text
- b. Participation in Class Discussion
- c. <u>Participation in Scheduled Simulations and Out-of-Class Activities</u> Some simulations of various processes in planning will be scheduled from time to time.



The simulation activities are expected of each student. There will be papers assigned as out of class work.

d. <u>Examinations</u> - Two examinations will be administered - a mid-term and a final. Both examinations will be 80% objective and 20% subjective questions.

The material covered in both examinations will be 80% from class presentation and 20% from outside class readings.

e. Grading Basis

| Attendance          |     | 10% |
|---------------------|-----|-----|
| Simulations         |     | 10% |
| Written Responses   | 20% |     |
| Midterm Examination |     | 30% |
| Final Examination   |     | 30% |

#### 3. SUGGESTED COURSE TOPICS

#### a. INTRODUCTION TO PLANNING PROCESS

- Introductions, establishment of course requirements, objectives, grading policy, and housekeeping details.
  - Overview of Planning
  - Definition of Planning
  - Planning Resources

#### b. ORGANIZING THE STAFF FOR A BUILDING PROGRAM

- What are the roles and responsibilities in the planning process for Capital Projects:
  - of the Administration
  - of the Community Advisory Committee (CAC)
  - of the School Board
- What school board policies are needed to legitimize the school planning effort?

#### c. LONG-RANGE PLANNING: IDENTIFICATION OF PROGRAM NEEDS

- What are Educational Program guidelines?
  - What is master planning for facilities?
  - How can program guidelines make a difference in the design of a new facility?
  - What instruments are used to identify program needs?



- How does facility planning interface with the long-range planning efforts of the local school system required by the state?

#### d. LONG-RANGE PLANNING: PROJECTION OF POPULATIONS

- How are clientele projections made?
- What are the various methods of projecting populations?
- What factors must be considered in making projections?
- How is a census organized?

#### e. SURVEY OF EXISTING FACILITIES

- Why are existing facilities included in developing a long-range facilities plan?
- Who conducts the building evaluation and who participates?

#### f. FACILITY EVALUATION INSTRUMENTS

- What types of data are needed for a long-range facilities plan?
- What type of instruments are utilized?

#### g. DEVELOPMENT OF THE CAPITAL IMPROVEMENT PROGRAM (CIP)

- What organizational office or department is responsible for development of the CIP?
- How are projects included in the CIP?
- How is the CIP approved and by what body?
- How are individual projects costed?
- What is the difference between a Capital Improvement Program and a Capital Budget?
- Where do school divisions get funds to construct facilities?
- Does the Commonwealth or Federal Government contribute funds for the completion of capital projects to local school divisions?

#### h. INVOLVING THE COMMUNITY

- Why should lay and professional people work together in planning a new facility?
- Who is responsible for the formulation of a Community Advisory Committee (CAC)?
- What are some guidelines for forming a Community Advisory Committee?
  - membership
  - responsibility
  - organization
  - support



#### relationship to other groups

#### i. ARCHITECTURAL SELECTION & SUPERVISION

- How are architects chosen and who is involved in the process?
- What criteria is used in selecting the architect?
- When should the architect be employed?
- What is the relationship between the architect, after being hired, and the School Board, administration, staff and community?

#### j. SITE SELECTION

- What legal requirements must be met in site acquisition?
- How is criteria developed for site selection?
- Who plays a part in the development of criteria?
- What are the considerations in selecting a site for a new facility?
- How are community people involved in selecting specific sites for new facilities?
- Who holds title to a site once it is acquired?

# k. PROGRAMMING EDUCATIONAL FACILITIES - WRITING EDUCATIONAL SPECIFICATIONS

- What are educational facility specifications?
- Who uses educational facility specifications?
- How much time is needed to develop educational facility specifications?
- Who is responsible for development of the document?
- What does the document contain?

#### 1. FACILITY DESIGN

- What are the architectural milestones in the design process?
- What input does the CAC have in the design process?
- Who is involved in the design review process?
- Who is on the Design Team and the Design Review Team?
- When does the school board approve the design of a facility?
- What does the local administrator need to know about barrier-free design?
- How can the local administrator guarantee that the facility meets all barrier-free regulations?
- What is the American National Standards Institute (ANSI)?

#### m. BIDDING THE CONSTRUCTION PROJECT

- Who conducts the bidding process?
- Who develops bidding documents?



- What are the constraints a public institution must observe in bidding a construction project?
- How are contracts awarded?
- Under what circumstances may an institution not award a contract to the lowest responsible bidder?
- What provisions of the State Procurement Act apply to local educational institutions?

#### n. CONSTRUCTION PHASE

- Who provides supervision of the construction project for the school division?
- What does the Clerk-of-the-Works do and who hires him?
- What are change orders and how are they approved?
- When does the building become the property of the state or local educational system?
- What steps must be taken before the building is accepted?
- Where do the funds come from for furniture and equipment?

#### o. ORIENTATION TO THE NEW FACILITY

- How is the staff recruited for a new facility?
- What is the purpose of the orientation?
- Who conducts the staff orientation at the facility?
- Who is involved in the orientation?

#### p. EVALUATION - PRODUCT & PROCESS

- What is the purpose of evaluation in facility planning?
- What forms of evaluation are used to assess planning of new facilities?
- Who should conduct the evaluation and who should be involved?
- What is evaluated: product and process?

#### q. SCHOOL PLANT MAINTENANCE AND OPERATION PROCEDURES

- What are the components of an effective maintenance program?
- How should the maintenance and operations program be organized?
- To whom is the local custodian responsible?
- What part does the building administrator play in the maintenance and operations program?
- How is the maintenance and operations program financed and budgeted?

#### r. ENERGY UTILIZATION AND CONSERVATION

How are energy audits conducted?



- What are some of the ways in which energy can be conserved in older buildings?
- How can the educational organization organize for efficient energy utilization?
- How does energy conservation fit into the over-all organizational programs? Are there funds available for energy conservation projects?

#### **EVALUATION** s.



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